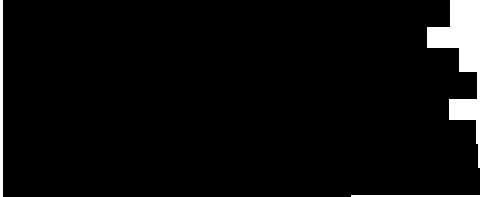


## Certification Summary Information Report

<b>Manufacturer</b>	American Honda Motor Co., Inc.	<b>Manufacturer Code</b>	HNX
<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
<b>Certificate Number</b>	N/A	<b>Certificate Issue Date</b>	N/A
<b>Certificate Effective Date</b>	N/A	<b>Certificate Revision Date</b>	N/A

<b>General Information</b>			
<b>Vehicle Category</b>	Highway Motorcycle - III(>-279cc)	<b>Sales Areas of All Vehicles/Engines in This Engine Family</b>	Some 50, Some 49
<b>Small Volume Manufacturer Recognition</b>	Regular Volume	<b>Are you Certifying This Vehicle/Engine By Design</b>	No
<b>Manufacturer Code assigned by CARB</b>	HOND	<b>Parent Company Name</b>	--
<b>EPA Certification Fee Paid Date</b>	06/06/2018	<b>Application Type</b>	Correction
<b>Permeation Family Name</b>	KHNXP METAL02	<b>Does this Perm Family participate in Average Banking and Trading?</b>	No
<b>Does this EF participate in an EPA and/or CARB emission averaging program?</b>	No	<b>Does this EF participate in EPA and/or CARB emission averaging program?</b>	
<b>Testing procedure applied for exhaust emissions values</b>	40CFR86, Subpart E: Chassis test	<b>If Other, Please provide EPA/CARB approval ID for this testing procedure</b>	--
<b>Are you the original manufacturer of the certifying vehicle/engine?</b>	No		
<b>Vehicle Original Equipment Manufacturer</b>	<b>Country where the Vehicles were assembled</b>	<b>Engine Original Equipment Manufacturer</b>	<b>Country where the Engines were assembled</b>
Honda Motor Co., Ltd.	Japan	Honda Motor Co., Ltd.	Japan
			
<b>Manufacturer Comments</b>			

## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
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**EPA Emission Standards and Certification Levels**

EPA Exhaust Emissions units:G/KM				
<b>Air Pollutant</b>	<b>HC</b>	<b>NOx</b>	<b>HC+NOx</b>	<b>CO</b>
Certification Level			0.3	0.8
Family Emission Limit				
Emission Standards			0.8	12.0
Applicant Notes	--			

  
**CARB Emission Standards and Certification Levels**

CARB HMC Early Compliance Multiplier: 1.0					Evaporative Emissions (HMC CARB-only) Diurnal + Hot Soak Evaporative Emissions (Unit: g/test):	
<b>Air Pollutant</b>	<b>THC</b>	<b>NOx</b>	<b>THC+NOx</b>	<b>CO</b>	KHNXU0018XZX	
Certification Level	0.2		0.3	1	0.3	
Family Emission Limit						
Emission Standards			0.8	12	2.0	
Emission Useful Life (UL) as applicable	UL (years):5		UL (km):30000		UL (years):5	UL (km):30000
Applicant Notes:						

  
**Engine Family Description**

<b>Engine Family Useful Life</b>	EPA Required Useful Life		
<b>EF Fuel System Type</b>	Single Fuel System		
	<b>Primary Operating Fuel Type</b>	<b>Fuel Type, If Other</b>	
	Gasoline	--	
<b>Combustion Cycle</b>	4-Stroke		
<b>Combustion Cycle, If Other</b>			
<b>Cylinder Arrangement</b>	In Line		
<b>Cylinder Arrangement, If Other</b>			
<b>Number of Cylinders</b>	4	<b>Valves per Cylinder</b>	4
<b>Engine Type</b>	Reciprocating (otto cycle)		
<b>Engine Type, If Other</b>			
<b>Engine Cooling Media</b>	Liquid Cooled		
<b>Engine Cooling Media, If Other</b>			
<b>Does this engine family contain multiple displacements?</b>	No	<b>New Technology</b>	No
<b>Technology explanation</b>	--		
<b>Applicant Notes</b>	--		

## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
<b>Exhaust Emission Control Information</b>			
<b>ECS Reference Number</b>	1	<b>Is this engine family equipped with a catalytic converter?</b>	Yes
<b>Total number of catalytic converters</b>	1	<b>Applicable catalytic converter configuration</b>	Single
<b>Catalytic converter type used</b>	Three Way Catalyst (TWC), single-bed, closed-loop warm up		
<b>Catalyst Manufacturer Name</b>	[REDACTED]		
<b>Catalyst Manufacturer Location</b>	[REDACTED]		
<b>Does the engine family use an Exhaust Gas Recirculation (EGR) technology as part of the Emission Control System?</b>	No	<b>Description of the EGR technology used</b>	--
<b>Applicable engine fuel system type</b>	Sequential Multiport FI		
<b>If Other, Enter a description of the fuel system</b>			
<b>Method of air aspiration for the engine</b>	Naturally Aspirated		
<b>Method of engine aspiration, If Other</b>			
<b>Charge Air Cooler Type</b>	No Air Cooler		
<b>Electronic engine control module type</b>	Engine Control Module		
<b>Applicable method of air injection methodology</b>	Pulse Secondary Air Injection		
<b>Air injection methodology, If Other</b>			
<b>Air/fuel feedback sensor used on this engine family</b>	Yes		
<b>Sensor Type</b>	Heated Oxygen Sensor		
<b>Sensor Type, If Other</b>			
<b>Number of feedback sensor(s) used</b>	1		
<b>Configuration of the feedback sensors arrangement</b>	Single		
<b>Applicant Notes</b>	[REDACTED]		

## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA		<b>Model Year</b>	2019								
<b>Exhaust Emission Data Vehicle/Engine (EDV/E) and Emissions Test Data</b>												
<b>Test Vehicle Number</b>	1		<b>EDV ID</b>	JH2SC7770HK000003								
<b>EDV/Test Data Type</b>	Carryover		<b>Original EF Name That Contains EDV Data</b>	HHNXC01.0BFA								
<b>DDV Engine Family if Different from EDV Engine Family</b>	--		<b>Configuration ID</b>	HED2								
<b>Model Name</b>	CBR1000S1		<b>Tire Pressure (in PSI)</b>	42								
<b>Road Load Force (N)</b>	131.		<b>Rated Power</b>	126								
<b>Rated Power Unit</b>	kW		<b>RPM at Rated Power</b>	10400								
<b>Cylinder (Block) Arrangement</b>	In Line		<b>Number of Cylinders</b>	4								
<b>ECS Number (From Tab 4)</b>	1		<b>Displacement (cc)</b>	1000								
<b>Transmission</b>	Manual		<b>Number of Gears</b>	6								
<b>N/V Ratio</b>	45.2		<b>Equivalent Inertia Mass (in kg)</b>	280								
<b>Curb Mass (in kg)</b>	196		<b>Loaded Vehicle Mass (kg):</b>	276								
<b>Manufacturer Comments</b>												
[REDACTED]												
<b>Exhaust Test</b>												
<b>Test Date</b>	<b>MFR Test ID Number</b>	<b>Test By</b>	<b>Test For</b>	<b>Test Fuel</b>	<b>Tested at Cumulative Km or Hr</b>	<b>Test Measurement Unit</b>	<b>Test Result Unit</b>	<b>HC</b>	<b>NOx</b>	<b>HC + NOx</b>	<b>CO</b>	<b>CO2</b>
[REDACTED]												
<b>EPA Certification Levels and Deterioration Factors</b>												
<b>End of Useful Life Emissions Value</b>			<b>HC</b>	<b>NOx</b>	<b>HC + NOx</b>		<b>CO</b>					
Calculated by applying DF			0.212	0.053	0.265		0.83					

## Certification Summary Information Report

Engine Family		KHNXC01.0CFA		Model Year		2019	
EPA Deterioration Factor Type		HC		NOx		HC + NOx	
Multiplicative		1.219		1.096		9.999	
						CO	
						1.174	
Federal Mandatory Greenhouse Gas (GHG) Reporting							
GHG Name	GHG Value	Unit of GHG Value	Measured/Estimated at Distance (km)	By Method	Test Vehicle ID	Reference/Citations	Test/Estimation Date
CO2	142	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
N2O	0.003	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
CH4	0.025	Grams Per Kilometer	3511	Tested result from the EDV(s) of the Engine Family	JH2SC7770HK000003	Directly measured value	10/21/2016
Applicant notes for GHG data							
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## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
<b>EPA - ONLY Permeation Emissions Control/Test Data</b>			
<b>Fuel Tank Permeation Emissions Details</b>			
<b>Fuel Tank #1</b>			
<b>Permeation Family Name</b>	KHNXPMETAL02	<b>Certification Level (g/m2/day)</b>	0.8
<b>Emission Standard (g/m2/day)</b>	1.5	<b>Family Emission Limit (g/m2/day)</b>	--
<b>Certification Method</b>	Emission tests	<b>Fuel Tank Manufacturer</b>	Honda Motor Co.,Ltd.
<b>Other</b>			
<b>Use Carry-over Test Data?</b>	Yes	<b>If carryover, from Permeation Family</b>	JHNXPMETAL02
<b>Carryover DF</b>	Yes	<b>If carryover, from DF Permeation Family</b>	JHNXPMETAL02
<b>Tank Material</b>	Metal		
<b>Tank Material if Other</b>			
<b>Control Strategy</b>	Inherently Low/Zero Permeation Material		
<b>Least Thickness (mm)</b>	--	<b>Least Barrier Weight (%)</b>	--
<b>Least Barrier Mol (%)</b>	--	<b>Least Barrier Thickness (mm)</b>	--
<b>Production Method</b>	Other Production Method		
<b>Production Method if Other</b>			
Press and we			
<b>Test Data (g/m2/day)</b>	0.80	<b>DF (g/m2/day)</b>	0.00
<b>EPA Certificate Number</b>	--		
<b>Fuel Line Permeation Emissions Details</b>			
<b>Fuel Line #1</b>			
<b>Certification Level (g/m2/day)</b>	10	<b>Emission Standard (g/m2/day)</b>	15
<b>Permeation Emissions Certification Method</b>	Emission tests	<b>Fuel Line Manufacturer</b>	SUMITOMO RIKO
<b>Certified By Design LINE</b>	--		
<b>Other</b>			
<b>Use Carry-over Test Data?</b>	Yes	<b>If carryover, from Permeation Family</b>	JHNXPMETAL02
<b>Carryover DF</b>	Yes	<b>If carryover, from DF Permeation Family</b>	JHNXPMETAL02
<b>Fuel Line Material</b>	Other		
<b>Fuel Line Material</b>			
FKM/ECO//AGE-ECO			
<b>Least Thickness (mm)</b>	3	<b>Test Results (g/m2/day)</b>	9.5
<b>DF (g/m2/day)</b>	0.0	<b>EPA Certificate Number</b>	--
<b>Fuel Line #2</b>			
<b>Certification Level (g/m2/day)</b>	10	<b>Emission Standard (g/m2/day)</b>	15
<b>Permeation Emissions Certification Method</b>	Emission tests	<b>Fuel Line Manufacturer</b>	SUMITOMO RIKO
<b>Certified By Design LINE</b>	--		

## Certification Summary Information Report

Engine Family	KHNXC01.0CFA	Model Year	2019
<b>Other</b>			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	JHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	JHNXPMETAL02
Fuel Line Material	Other		
Fuel Line Material			
FKM/ECO//AGE-ECO			
Least Thickness (mm)	3	Test Results (g/m2/day)	9.5
DF (g/m2/day)	0.0	EPA Certificate Number	--
<b>Fuel Line #3</b>			
Certification Level (g/m2/day)	10	Emission Standard (g/m2/day)	15
Permeation Emissions Certification Method	Emission tests	Fuel Line Manufacturer	KOKOKU
Certified By Design LINE	--		
<b>Other</b>			
Use Carry-over Test Data?	Yes	If carryover, from Permeation Family	JHNXPMETAL02
Carryover DF	Yes	If carryover, from DF Permeation Family	JHNXPMETAL02
Fuel Line Material	Other		
Fuel Line Material			
FKM/ECO			
Least Thickness (mm)	2	Test Results (g/m2/day)	10.1
DF (g/m2/day)	0.0	EPA Certificate Number	--
<b>Comments</b>			

## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
<b>Models Covered</b>			
<b>Model #1</b>			
<b>Reference Model Number</b>	1	<b>Final Assembly Manufacturer Name</b>	Honda Motor Co. Ltd.
<b>Manufacturer Model Name</b>	CBR1000RR	<b>Commercial / Advertised Model Name</b>	CBR1000RR
<b>Engine Code</b>	KED1	<b>Vehicle Category</b>	HMC:Class III
<b>Evaporative Family (CARB)</b>	KHNXU0018XZX	<b>Number of Evaporative Canisters (CARB)</b>	1
<b>Displacement (cc)</b>	1000	<b>Bore (mm)</b>	76.0
<b>Stroke (mm)</b>	55.1	<b>Basic Ignition Timing (degrees, BTDC)</b>	3.3
<b>Rated Power (kW)</b>	126	<b>RPM @ Rated Power</b>	10400
<b>Rated Torque (nt-m)</b>	116	<b>RPM @ Rated Torque</b>	10400
<b>N/V Ratio</b>	45.2	<b>Curb Mass (kg)</b>	195
<b>Equivalent Inertial Mass (kg)</b>	280	<b>Loaded Vehicle Mass (kg):</b>	275
<b>Transmission (e.g. M5, A3, etc.)</b>	M6		
<b>Vehicle Emission Compliance Information (VECI) Label Type</b>			
50-state sales w/ 50-state Label			
<b>Fuel System</b>			
<b>Emission Control System (model / rating specific)</b>	1	<b>Projected Sales (CBI) - CA Only</b>	
<b>Projected Sales (CBI) - US Total (includes CA Sales)</b>		<b>Projected Sales (CBI) - US (49-States)</b>	
<b>Mfr Previously Exempted?</b>	--		
<b>Permeation Family Name (s)</b>	KHNXPMETAL02		
<b>Applicant Notes</b>			
<b>Model #2</b>			
<b>Reference Model Number</b>	2	<b>Final Assembly Manufacturer Name</b>	Honda Motor Co.Ltd.
<b>Manufacturer Model Name</b>	CBR1000RA	<b>Commercial / Advertised Model Name</b>	CBR1000RR ABS
<b>Engine Code</b>	KED2	<b>Vehicle Category</b>	HMC:Class III
<b>Evaporative Family (CARB)</b>	KHNXU0018XZX	<b>Number of Evaporative Canisters (CARB)</b>	1
<b>Displacement (cc)</b>	1000	<b>Bore (mm)</b>	76.0
<b>Stroke (mm)</b>	55.1	<b>Basic Ignition Timing (degrees, BTDC)</b>	3.3
<b>Rated Power (kW)</b>	126	<b>RPM @ Rated Power</b>	10400
<b>Rated Torque (nt-m)</b>	116	<b>RPM @ Rated Torque</b>	10400
<b>N/V Ratio</b>	45.2	<b>Curb Mass (kg)</b>	197
<b>Equivalent Inertial Mass (kg)</b>	280	<b>Loaded Vehicle Mass (kg):</b>	277
<b>Transmission (e.g. M5, A3, etc.)</b>	M6		
<b>Vehicle Emission Compliance Information (VECI) Label Type</b>			
50-state sales w/ 50-state Label			
<b>Fuel System</b>			
<b>Emission Control System (model / rating specific)</b>	1	<b>Projected Sales (CBI) - CA Only</b>	



## Certification Summary Information Report

<b>Engine Family</b>	KHNXC01.0CFA	<b>Model Year</b>	2019
<b>Projected Sales (CBI) - US Total (includes CA Sales)</b>		<b>Projected Sales (CBI) - US (49-States)</b>	
<b>Mfr Previously Exempted?</b>	--		
<b>Permeation Family Name (s)</b>	KHNXPMETAL02		
<b>Applicant Notes</b>			
<b>Model #3</b>			
<b>Reference Model Number</b>	3	<b>Final Assembly Manufacturer Name</b>	Honda Motor Co.Ltd.
<b>Manufacturer Model Name</b>	CBR1000S1	<b>Commercial / Advertised Model Name</b>	CBR1000RR SP
<b>Engine Code</b>	KED2	<b>Vehicle Category</b>	HMC:Class III
<b>Evaporative Family (CARB)</b>	KHNXU0018XZX	<b>Number of Evaporative Canisters (CARB)</b>	1
<b>Displacement (cc)</b>	1000	<b>Bore (mm)</b>	76.0
<b>Stroke (mm)</b>	55.1	<b>Basic Ignition Timing (degrees, BTDC)</b>	3.3
<b>Rated Power (kW)</b>	126	<b>RPM @ Rated Power</b>	10400
<b>Rated Torque (nt-m)</b>	116	<b>RPM @ Rated Torque</b>	10400
<b>N/V Ratio</b>	45.2	<b>Curb Mass (kg)</b>	196
<b>Equivalent Inertial Mass (kg)</b>	280	<b>Loaded Vehicle Mass (kg):</b>	276
<b>Transmission (e.g. M5, A3, etc.)</b>	M6		
<b>Vehicle Emission Compliance Information (VECI) Label Type</b>	50-state sales w/ 50-state Label		
<b>Fuel System</b>			
<b>Emission Control System (model / rating specific)</b>	1	<b>Projected Sales (CBI) - CA Only</b>	
<b>Projected Sales (CBI) - US Total (includes CA Sales)</b>		<b>Projected Sales (CBI) - US (49-States)</b>	
<b>Mfr Previously Exempted?</b>	--		
<b>Permeation Family Name (s)</b>	KHNXPMETAL02		
<b>Applicant Notes</b>			
<b>Model #4</b>			
<b>Reference Model Number</b>	4	<b>Final Assembly Manufacturer Name</b>	Honda Motor Co.Ltd
<b>Manufacturer Model Name</b>	CBR1000S1	<b>Commercial / Advertised Model Name</b>	CBR1000RR SP
<b>Engine Code</b>	KED3	<b>Vehicle Category</b>	HMC:Class III
<b>Evaporative Family (CARB)</b>	--	<b>Number of Evaporative Canisters (CARB)</b>	1
<b>Displacement (cc)</b>	1000	<b>Bore (mm)</b>	76.0
<b>Stroke (mm)</b>	55.1	<b>Basic Ignition Timing (degrees, BTDC)</b>	3.3
<b>Rated Power (kW)</b>	126	<b>RPM @ Rated Power</b>	10400
<b>Rated Torque (nt-m)</b>	116	<b>RPM @ Rated Torque</b>	10400
<b>N/V Ratio</b>	45.2	<b>Curb Mass (kg)</b>	195
<b>Equivalent Inertial Mass (kg)</b>	280	<b>Loaded Vehicle Mass (kg):</b>	275

## Certification Summary Information Report

Engine Family	KHNXC01.0CFA	Model Year	2019
Transmission (e.g. M5, A3, etc.)	M6		
Vehicle Emission Compliance Information (VECI) Label Type	49-state Sales w/ 49-state Label		
Fuel System			
Emission Control System (model / rating specific)	1	Projected Sales (CBI) - CA Only	
Projected Sales (CBI) - US Total (includes CA Sales)		Projected Sales (CBI) - US (49-States)	
Mfr Previously Exempted?	--		
Permeation Family Name (s)	KHNXPMETAL02		
Applicant Notes			